

## Amendments to the Claims:

1. (Currently Amended) An OFDM receiver comprising:

at least four antennas to receive an OFDM modulated high frequency signal;  
and

a plurality of OFDM demodulators to each of which a ~~base-band~~baseband signal of a ~~time-areatime~~time domain thereto based on the high frequency signal is input and from each of which a ~~base-band~~baseband signal of a ~~frequency-areafrequency~~frequency domain is output,

wherein the ~~each~~ OFDM demodulators are ~~arranged in~~is coupled to plural a respective antenna groups, each antenna group containing at least two of the at least four antennas;

a first phase shifter coupled to a second antenna of each antenna group, an output of the first phase shifter and an output of a first antenna of each antenna group being combined in a first adder to provide the baseband signal to ~~is arranged on a former stage side of each of the OFDM demodulators;~~

a first control circuit coupled to an output of the first adder and to a second input of each first phase shifter;

a second phase shifter ~~is arranged at a latter stage of~~coupled to an output of a second OFDM demodulator that is different from a ~~specific-first~~ OFDM demodulator among the OFDM demodulators,

a second control circuit coupled to an output of the plurality of OFDM demodulators and to a second input of the second phase shifter;

a second adder coupled to an output of the second phase shifter and an output of the second OFDM demodulator, wherein

a signal is diversity-synthesized by the first phase shifter until the ~~base-band~~baseband signal of the ~~time-areatime~~time domain is inputted to each of the OFDM demodulators, and the ~~base-band~~baseband signal of the ~~frequency-areafrequency~~frequency domain is diversity-synthesized by the second phase shifter.

2. (Currently amended) The OFDM receiver according to claim 1, wherein the ~~base-band~~baseband of the ~~time-areatime~~time domain based on the high frequency signal ~~is received by a specific-first~~ antenna in each of the antenna groups, and the

~~base band~~baseband signal of the ~~time area~~time domain based on the high frequency signal ~~is received by a second antenna different from the specific~~first antenna are diversity-synthesized by the first phase shifter.

3. (Currently Amended) The OFDM receiver according to claim 2, wherein each antenna in each antenna group is coupled to a receiving portion that frequency-converts the high frequency signal to an intermediate frequency signal and an A/D converter that converts the intermediate frequency signal to a digital signal is coupled to each of the receiving portions~~and outputs the base band signal of the time area~~ ~~are arranged for each of the antennas, and wherein the first phase shifter is arranged at a next stage of an output of the a second A/D converter corresponding to the second antenna is coupled to the first phase shifter,~~ and a first adder is ~~arranged between the first phase shifter and the~~an output of a first A/D converter corresponding to the specific first antenna is coupled to the first adder.

4. (Currently Amended) The OFDM receiver according to claim 1, wherein an intermediate frequency signal based on the high frequency signal received by a ~~specific~~first antenna in each of the antenna groups, and an intermediate frequency signal based on the high frequency signal received by a second antenna different from the ~~specific~~first antenna are diversity-synthesized by the first phase shifter.

5. (Currently Amended) The OFDM receiver according to claim 4, wherein each antenna in each antenna group is coupled to a receiving portion that frequency-converts the high frequency signal to the intermediate frequency signal~~is arranged for each of the antennas, and an output of a first one of the receiving portions corresponding to the first antenna is coupled to the first adder and an output of a second one of the receiving portions corresponding to the second antenna is coupled to the phase shifter.~~ ~~the first phase shifter is arranged at a next stage of the receiving portion corresponding to the second antenna, and a first adder is arranged between the receiving portion corresponding to the specific antenna and the first phase shifter.~~

6. (Currently Amended) The OFDM receiver according to claim 1, wherein the high frequency signal received by a ~~specific~~first antenna in each of the antenna

groups, and the high frequency signal received by a second antenna different from the ~~specific~~first antenna are diversity-synthesized by the first phase shifter.

7. (Cancelled)

8. (Currently Amended) The OFDM receiver according to claim 3, further comprising a power detector to detect electric power of the ~~base-band~~baseband signal of the ~~time-area~~time domain and a phase controller to control phase setting of the first phase shifter to maximize the electric power.

9. (Currently Amended) The OFDM receiver according to claim 5, further comprising a power detector to detect electric power of the ~~base-band~~baseband signal of the ~~time-area~~time domain and a phase controller to control phase setting of the first phase shifter to maximize the electric power.

10. (Currently Amended) The OFDM receiver according to claim 7~~6~~, further comprising a power detector to detect electric power of the ~~base-band~~baseband signal of the ~~time-area~~time domain, and a phase controller to control phase setting of the first phase shifter to maximize the electric power.

11-12. (Cancelled)